

# 77% FOOD GRADE SOLID CALCIUM CHLORIDE

## Product Data Sheet

### General Description

Food grade calcium chloride is produced under strict supervision to ensure high levels of purity and consistency. The product complies with EC 2000/63 and FCC standards. To ensure that the product meets our stringent demands, comprehensive analysis techniques are employed before the product is shipped. A Certificate of Analysis is provided with this product.

### Applications

TETRA food grade calcium chloride is used in various applications within the food, beverage and pharmaceutical industries. Some examples of common applications are listed below.

- In the production of beer and soft drinks,  $\text{CaCl}_2$  is used as a source of calcium to regulate the hardness of water.
- In enzyme production, the calcium ion acts as a co-factor in some products.
- In the production of cheese,  $\text{CaCl}_2$  is used as a source of calcium.
- $\text{CaCl}_2$  is also used to increase the firmness of canned fruits and pickled vegetables.
- $\text{CaCl}_2$  is also used as a secondary cooling agent in various processes that operate according to food regulations.

### Availability

Solid food grade calcium chloride flakes are produced in Finland. Solid food grade calcium chloride is available worldwide through our network of distributors in the following packaging options.

#### SOLID FOOD GRADE $\text{CaCl}_2$ PACKAGING

Package	Dimensions LxWxH	Units
25 kg Bag	1080x1070x1050	42/Pallet
1000 kg Big Bag	1000x1000x1350	1

#### TETRA Chemicals Europe

##### Sweden

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### Safety and Handling

Calcium chloride is a strong salt. Protective clothing, rubber gloves and eye protection are recommended. Rubber safety boots should also be worn in work areas, since calcium chloride can damage leather. This product should be handled in areas with proper ventilation. Before using this product, refer to the MSDS (available on the Company's website) for complete safety and handling guidelines. For proper disposal guidelines for calcium chloride wastes, consult the appropriate local regulatory authorities.

Calcium chloride is a hygroscopic product and should be stored indoors on pallets at normal temperatures. If stored according to recommendations, the maximum shelf life is two (2) years.

#### PHYSICAL PROPERTIES

<b>Appearance</b>	White flakes
<b>Odor</b>	None
<b>Bulk Density</b>	820 kg/m <sup>3</sup>

#### CHEMICAL PROPERTIES

<b><math>\text{CaCl}_2</math> Concentration</b>	minimum 77%
<b>pH (in 5% <math>\text{CaCl}_2</math> solution @ 20°C)</b>	9 to 11
<b>Insoluble in water</b>	maximum 0.20%
<b>Mg and Alkali Salts</b>	maximum 4%
<b>Alkalinity as <math>\text{Ca(OH)}_2</math></b>	maximum 0.3%
<b>F</b>	maximum 40 mg/kg
<b>Heavy metals (as Pb)</b>	maximum 20 mg/kg
<b>Pb</b>	maximum 5 mg/kg
<b>As</b>	maximum 3 mg/kg

#### TYPICAL SIEVE ANALYSIS

Sieve	Approximate % Passing
6.3 mm	100
4 mm	90
2 mm	40
1 mm	10

#### SPECIFICATIONS

- Food Chemicals Codex (FCC), 5<sup>th</sup> edition, 2004
- EC 2000/63

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